FIG. 1

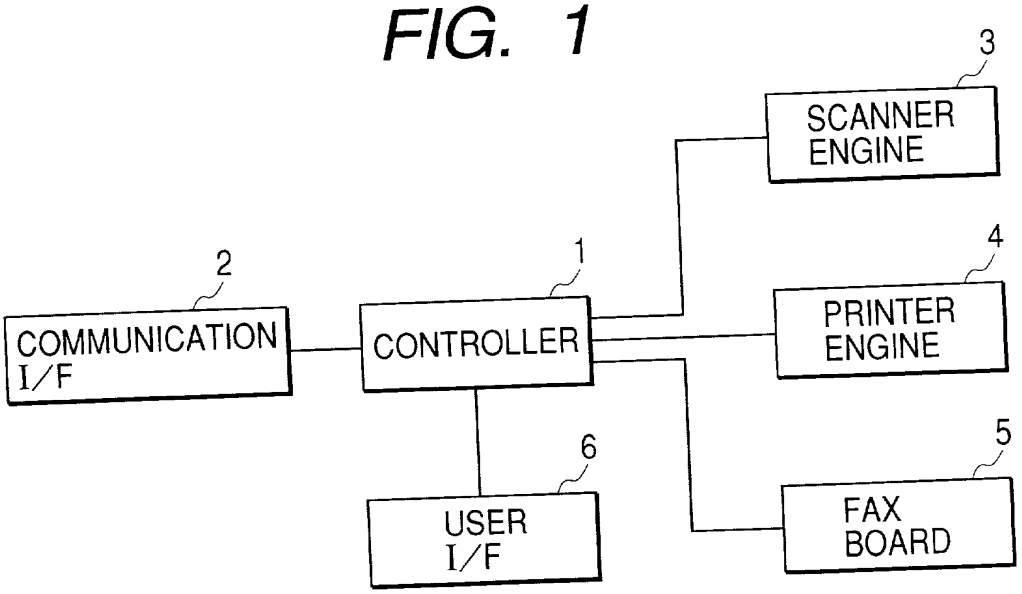

3
SCANNER ENGINE
2
1
4
COMMUNICATION I/F
CONTROLLER
PRINTER ENGINE
6
5
USER I/F
FAX BOARD

FIG. 2

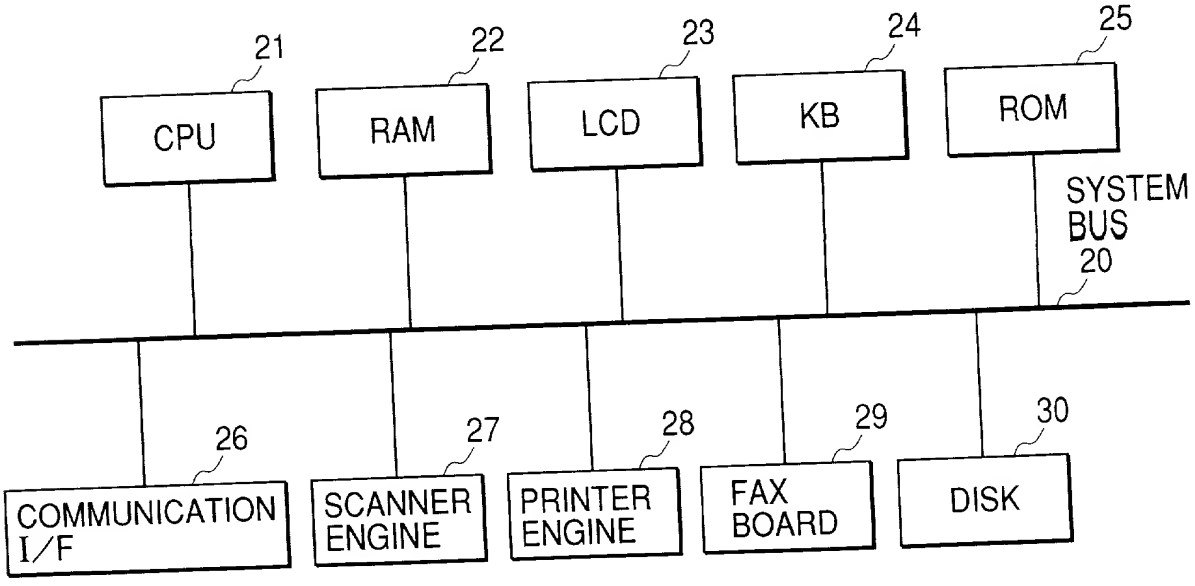

21
22
23
24
25
CPU
RAM
LCD
KB
ROM
SYSTEM BUS
20
26
27
28
29
30
COMMUNICATION I/F
SCANNER ENGINE
PRINTER ENGINE
FAX BOARD
DISK

FIG. 3

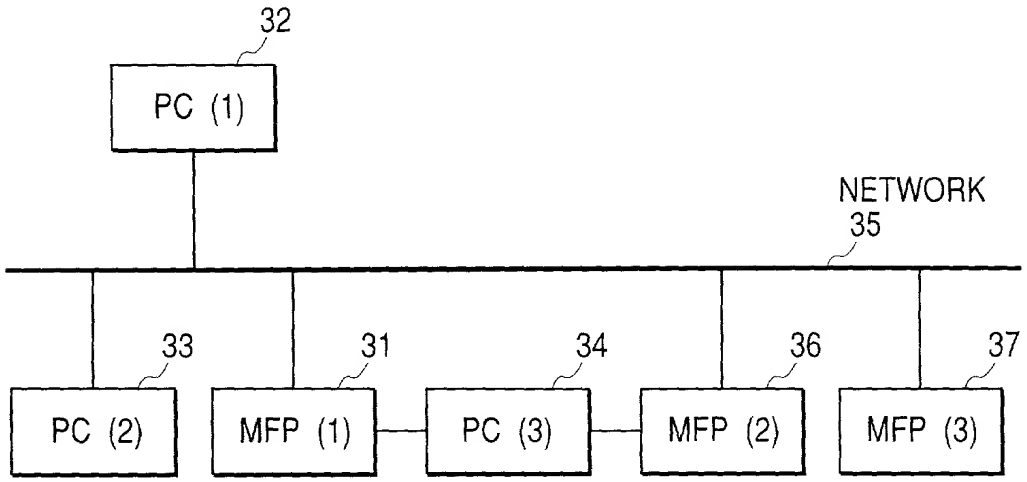
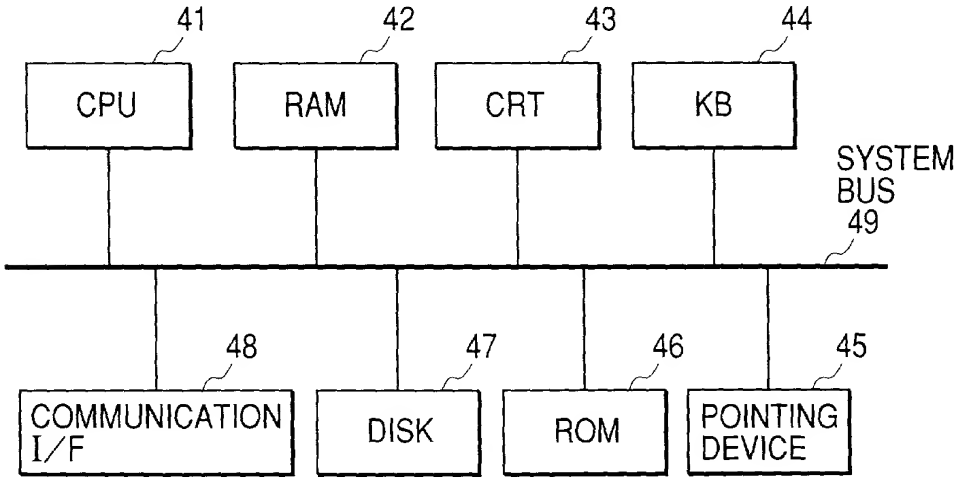

32
PC (1)
NETWORK
35
33
31
34
36
37
PC (2)
MFP (1)
PC (3)
MFP (2)
MFP (3)

FIG. 4


41
42
43
44
CPU
RAM
CRT
KB
SYSTEM
BUS
49
48
47
46
45
COMMUNICATION
I/F
DISK
ROM
POINTING
DEVICE

T05220 '069FT660

FIG. 5

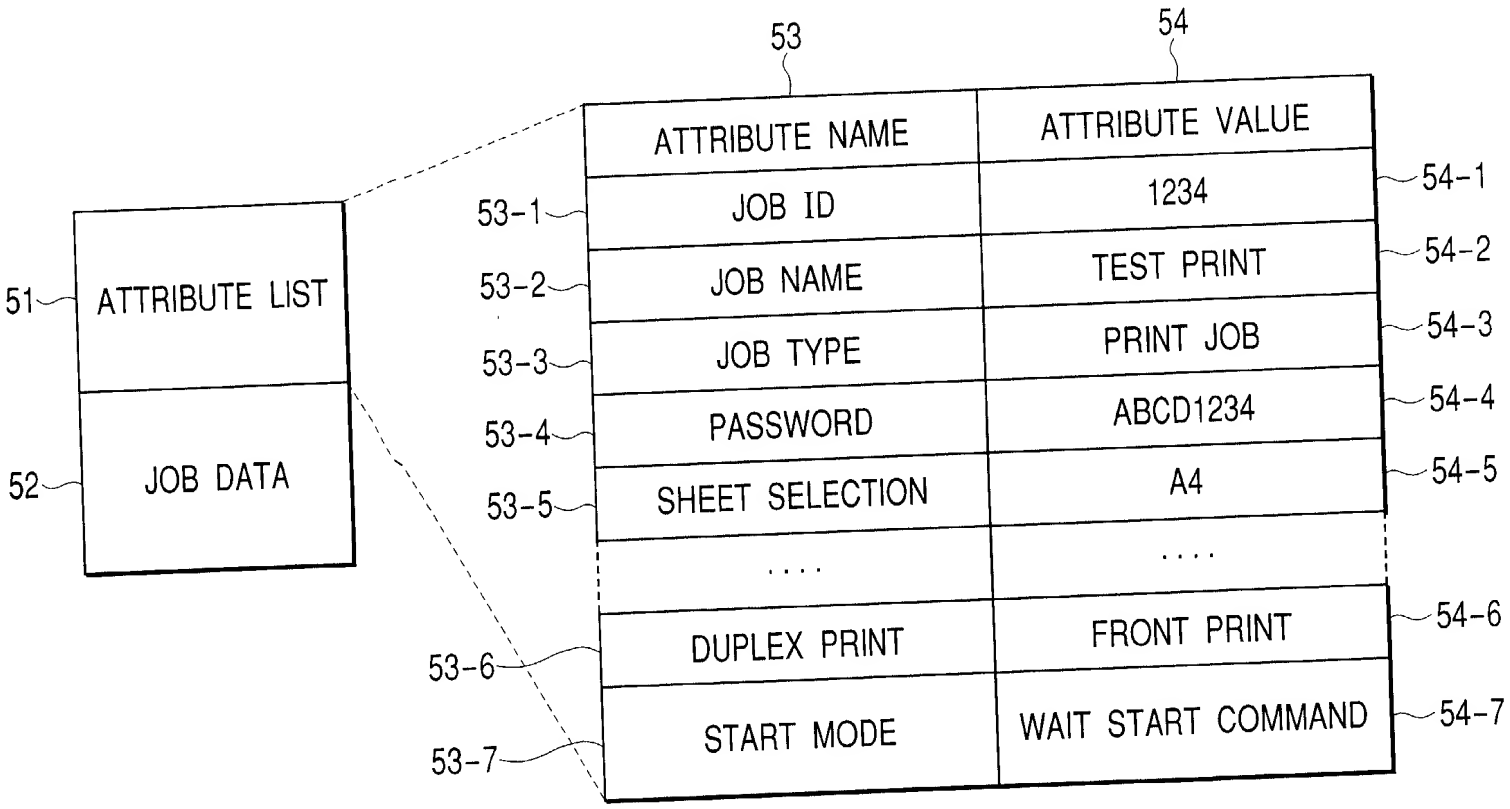


FIG. 6

	61 ATTRIBUTE NAME	62 SETTING	63 CHANGING	64 ACQUIRING
65-1	JOB ID	FALSE	FALSE	TRUE
65-2	JOB NAME	TRUE	FALSE	TRUE
65-3	JOB TYPE	TRUE	FALSE	TRUE
65-4	PASSWORD	TRUE	FALSE	FALSE
65-5	SHEET SELECTION	TRUE	FALSE	TRUE
	....	....	....	....
65-6	DUPLEX PRINT	TRUE	TRUE	TRUE
65-7	START MODE	TRUE	FALSE	TRUE

FIG. 7

301	DESIGNATE START TIME WITH ABSOLUTE TIME
302	DESIGNATE START TIME WITH RELATIVE TIME
303	WAIT COMMAND WITH PASSWORD
304	WAIT START COMMAND
305	START IMMEDIATELY

FIG. 8

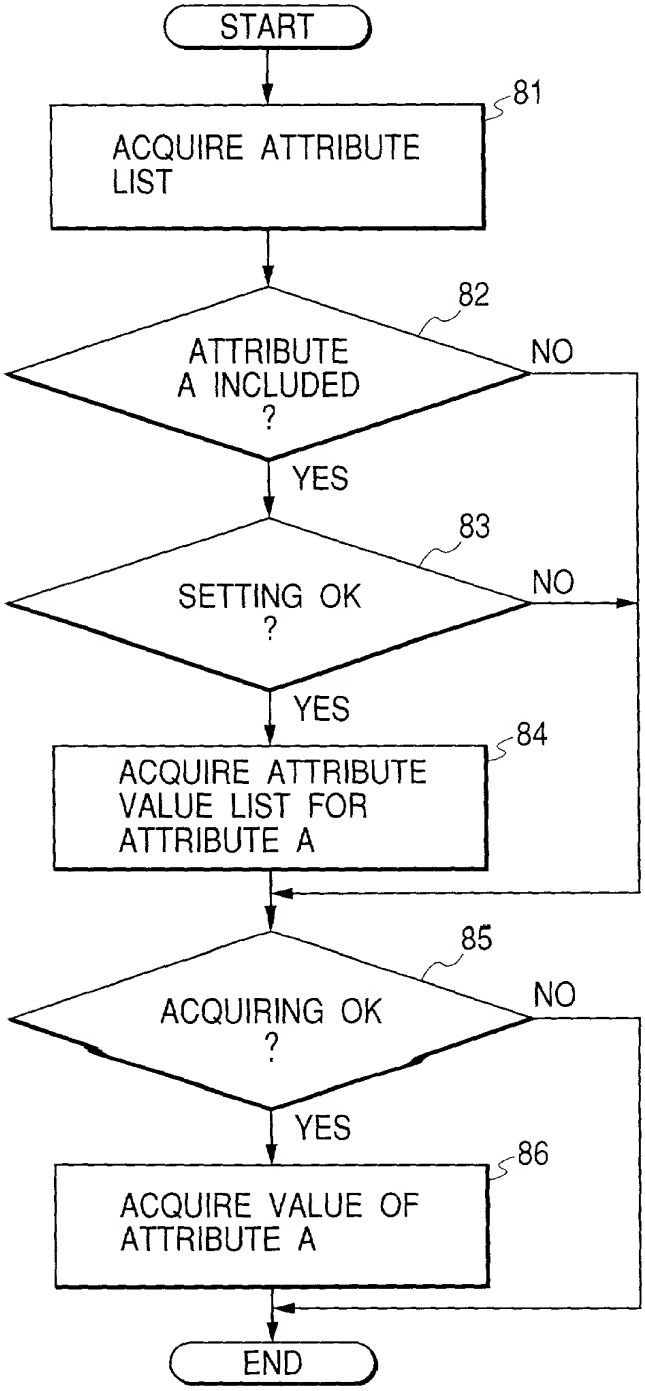

START
ACQUIRE ATTRIBUTE LIST
81
ATTRIBUTE A INCLUDED ?
82
NO
YES
SETTING OK ?
83
NO
YES
ACQUIRE ATTRIBUTE VALUE LIST FOR ATTRIBUTE A
84
ACQUIRING OK ?
85
NO
YES
ACQUIRE VALUE OF ATTRIBUTE A
86
END

FIG. 9

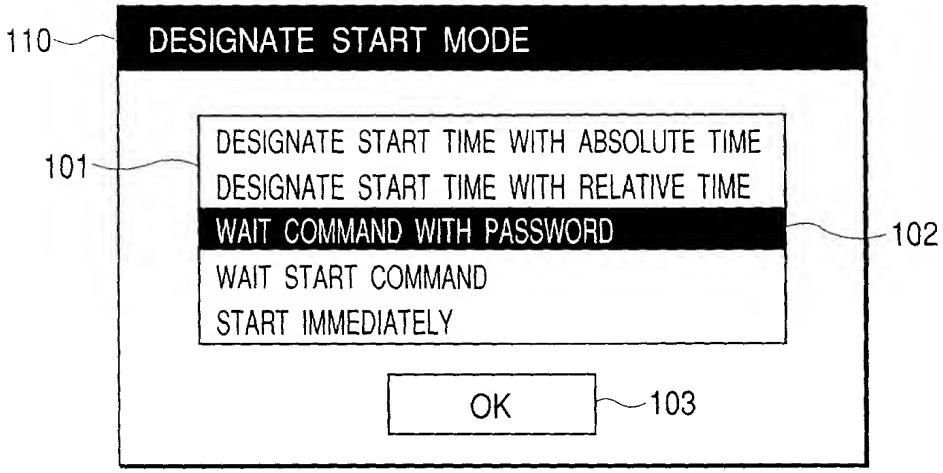

110
DESIGNATE START MODE
101
DESIGNATE START TIME WITH ABSOLUTE TIME
DESIGNATE START TIME WITH RELATIVE TIME
WAIT COMMAND WITH PASSWORD
WAIT START COMMAND
START IMMEDIATELY
102
OK
103

FIG. 10

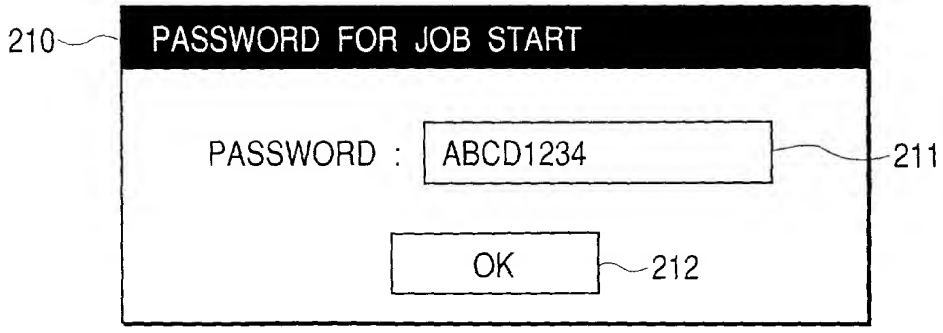

210
PASSWORD FOR JOB START
PASSWORD :
ABCD1234
211
OK
212

FIG. 11

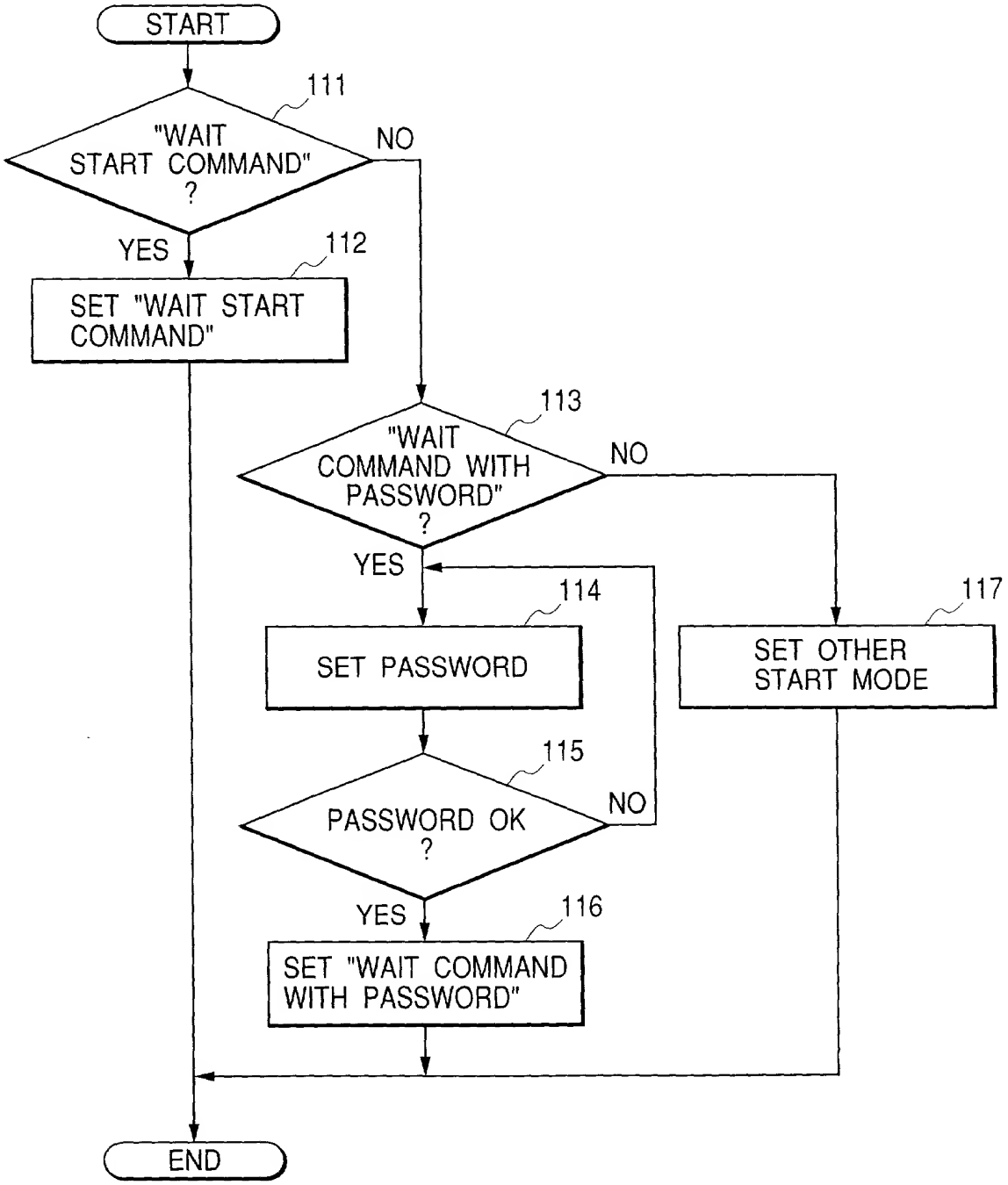

START
111
"WAIT START COMMAND" ?
NO
YES
112
SET "WAIT START COMMAND"
113
"WAIT COMMAND WITH PASSWORD" ?
NO
YES
114
SET PASSWORD
115
PASSWORD OK ?
NO
YES
116
SET "WAIT COMMAND WITH PASSWORD"
117
SET OTHER START MODE
END

FIG. 12

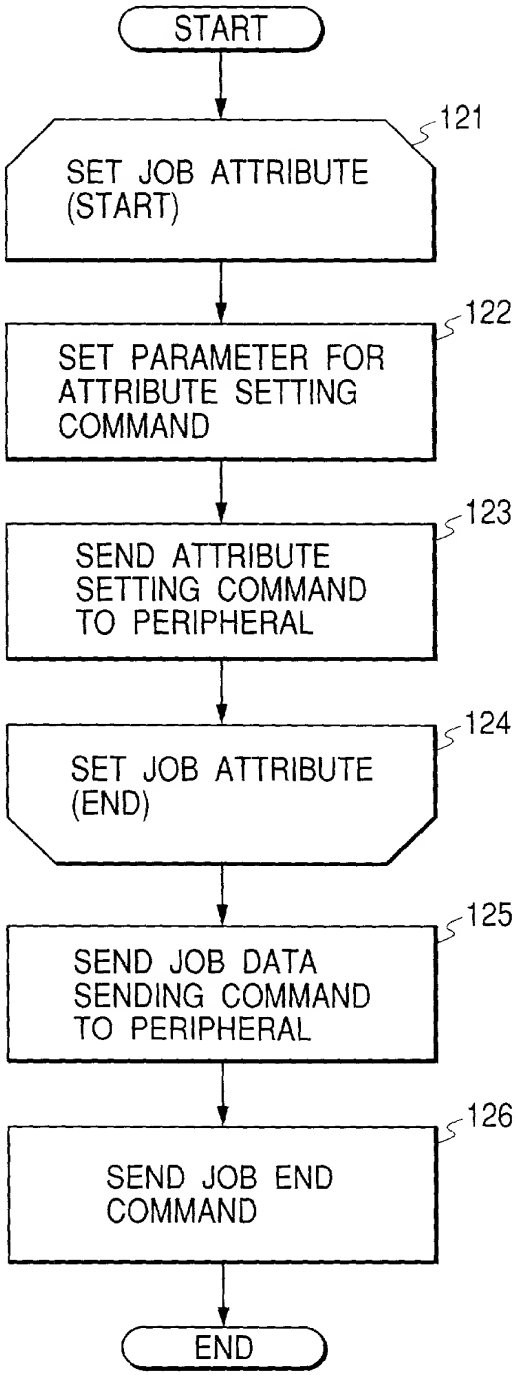

START
121
SET JOB ATTRIBUTE (START)
122
SET PARAMETER FOR ATTRIBUTE SETTING COMMAND
123
SEND ATTRIBUTE SETTING COMMAND TO PERIPHERAL
124
SET JOB ATTRIBUTE (END)
125
SEND JOB DATA SENDING COMMAND TO PERIPHERAL
126
SEND JOB END COMMAND
END

FIG. 13

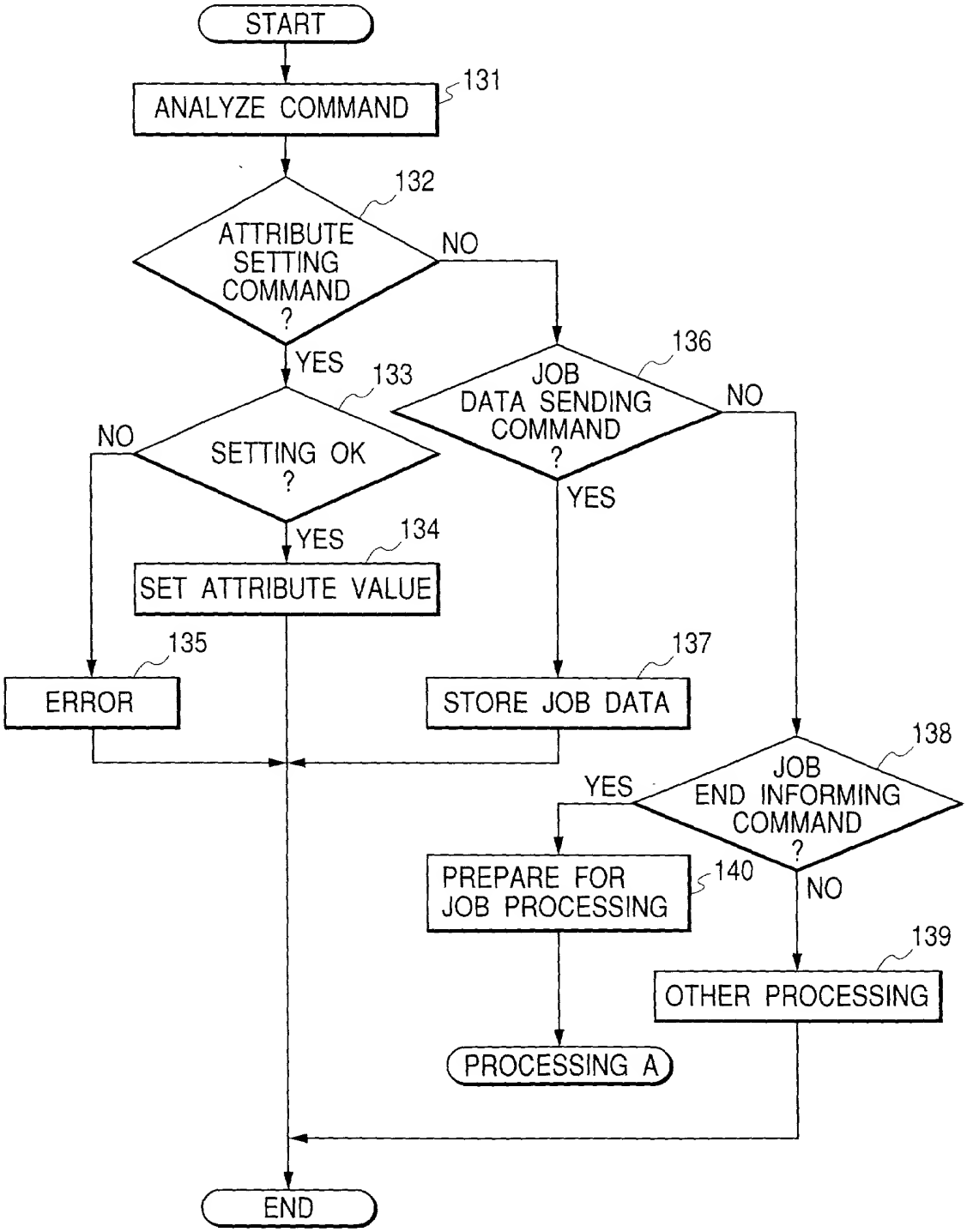

START
ANALYZE COMMAND
131
ATTRIBUTE SETTING COMMAND ?
132
NO
YES
SETTING OK ?
133
NO
YES
JOB DATA SENDING COMMAND ?
136
NO
YES
SET ATTRIBUTE VALUE
134
ERROR
135
STORE JOB DATA
137
JOB END INFORMING COMMAND ?
138
YES
NO
PREPARE FOR JOB PROCESSING
140
OTHER PROCESSING
139
PROCESSING A
END

FIG. 14

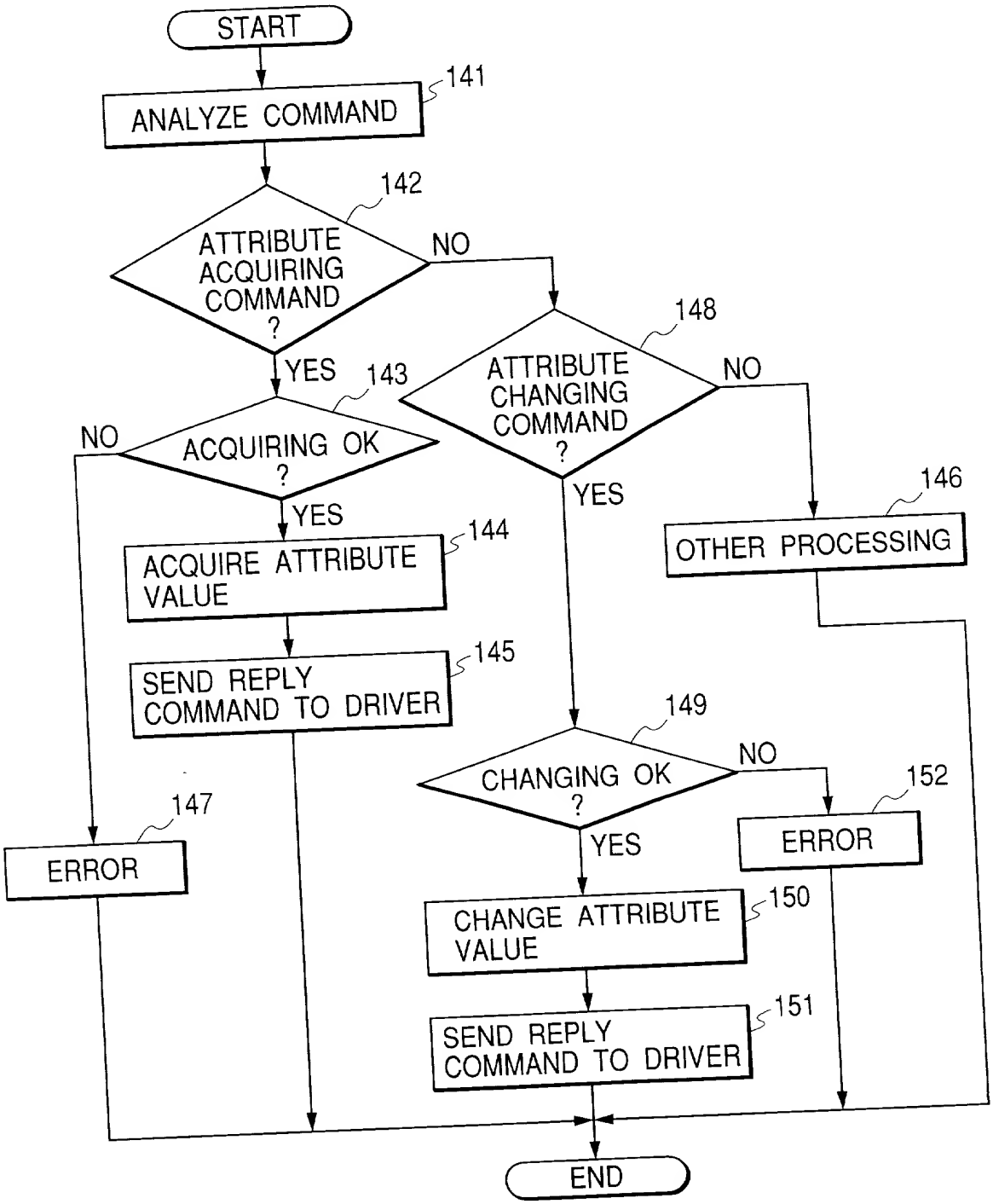

START
ANALYZE COMMAND
141
ATTRIBUTE ACQUIRING COMMAND ?
142
NO
YES
ACQUIRING OK ?
143
NO
YES
ACQUIRE ATTRIBUTE VALUE
144
SEND REPLY COMMAND TO DRIVER
145
ERROR
147
ATTRIBUTE CHANGING COMMAND ?
148
NO
YES
OTHER PROCESSING
146
CHANGING OK ?
149
NO
YES
ERROR
152
CHANGE ATTRIBUTE VALUE
150
SEND REPLY COMMAND TO DRIVER
151
END

FIG. 15

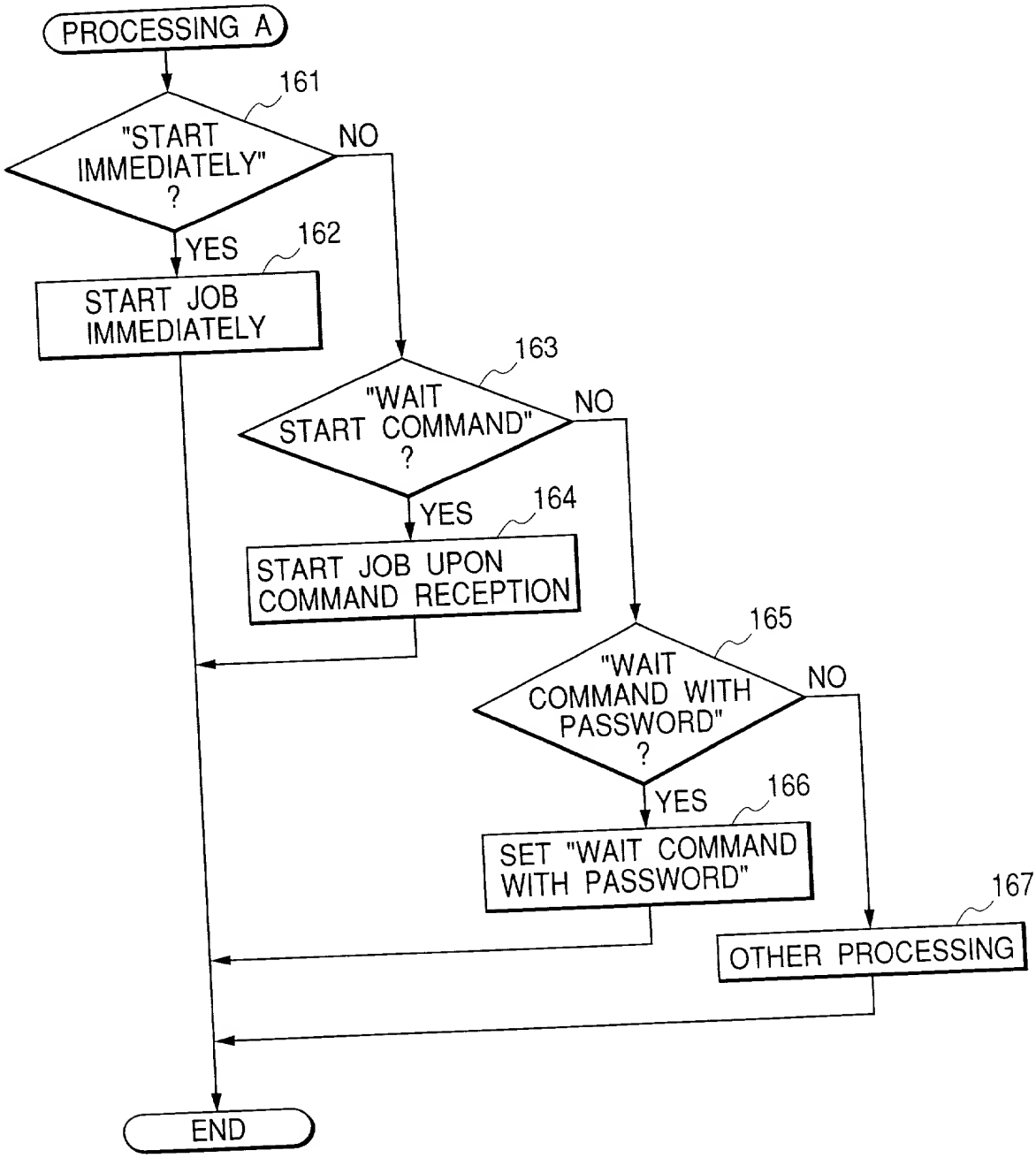

PROCESSING A
161
"START IMMEDIATELY" ?
NO
YES
162
START JOB IMMEDIATELY
163
"WAIT START COMMAND" ?
NO
YES
164
START JOB UPON COMMAND RECEPTION
165
"WAIT COMMAND WITH PASSWORD" ?
NO
YES
166
SET "WAIT COMMAND WITH PASSWORD"
167
OTHER PROCESSING
END

FIG. 16

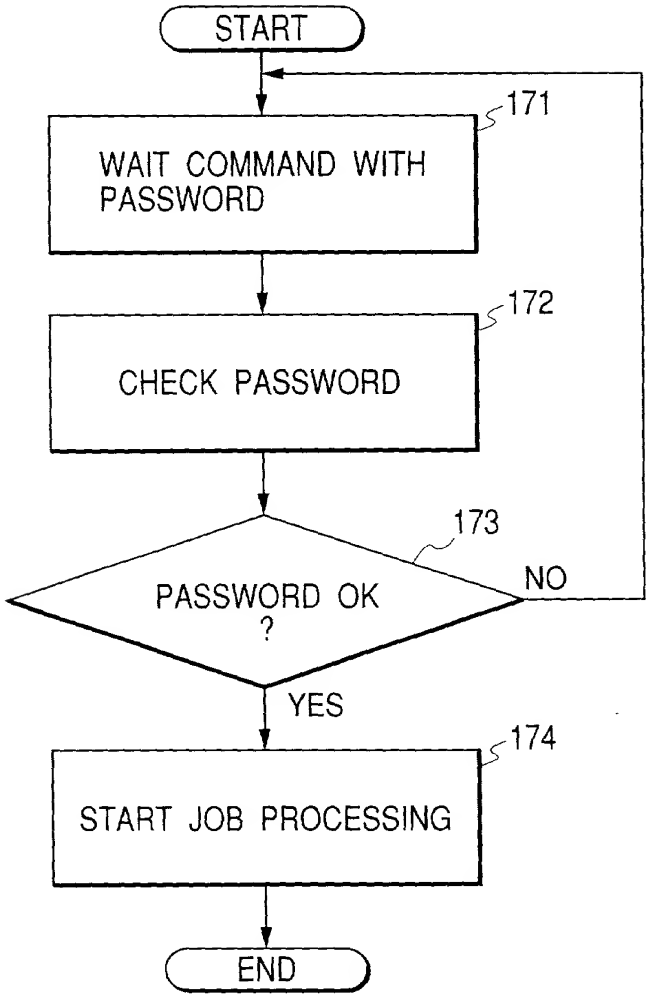

START
171
WAIT COMMAND WITH PASSWORD
172
CHECK PASSWORD
173
PASSWORD OK ?
NO
YES
174
START JOB PROCESSING
END

FIG. 17

MEMORY MAP OF MEM MEDIUM (FD/CD-ROM)

DIRECTORY
1ST DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.8
2ND DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.11
3RD DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.12
4TH DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.13
5TH DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.14
6TH DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.15
7TH DATA PROCESSING PROGRAM PROGRAM CODES FOR FLOWCHART OF FIG.16

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FIG. 18

	MFP31	MFP36	MFP37
301	DESIGNATE START TIME WITH ABSOLUTE TIME	WAIT COMMAND WITH PASSWORD	WAIT START COMMAND
302	DESIGNATE START TIME WITH RELATIVE TIME	START IMMEDIATELY	START IMMEDIATELY
303	WAIT COMMAND WITH PASSWORD		
304	WAIT START COMMAND		
305	START IMMEDIATELY		

FIG. 19

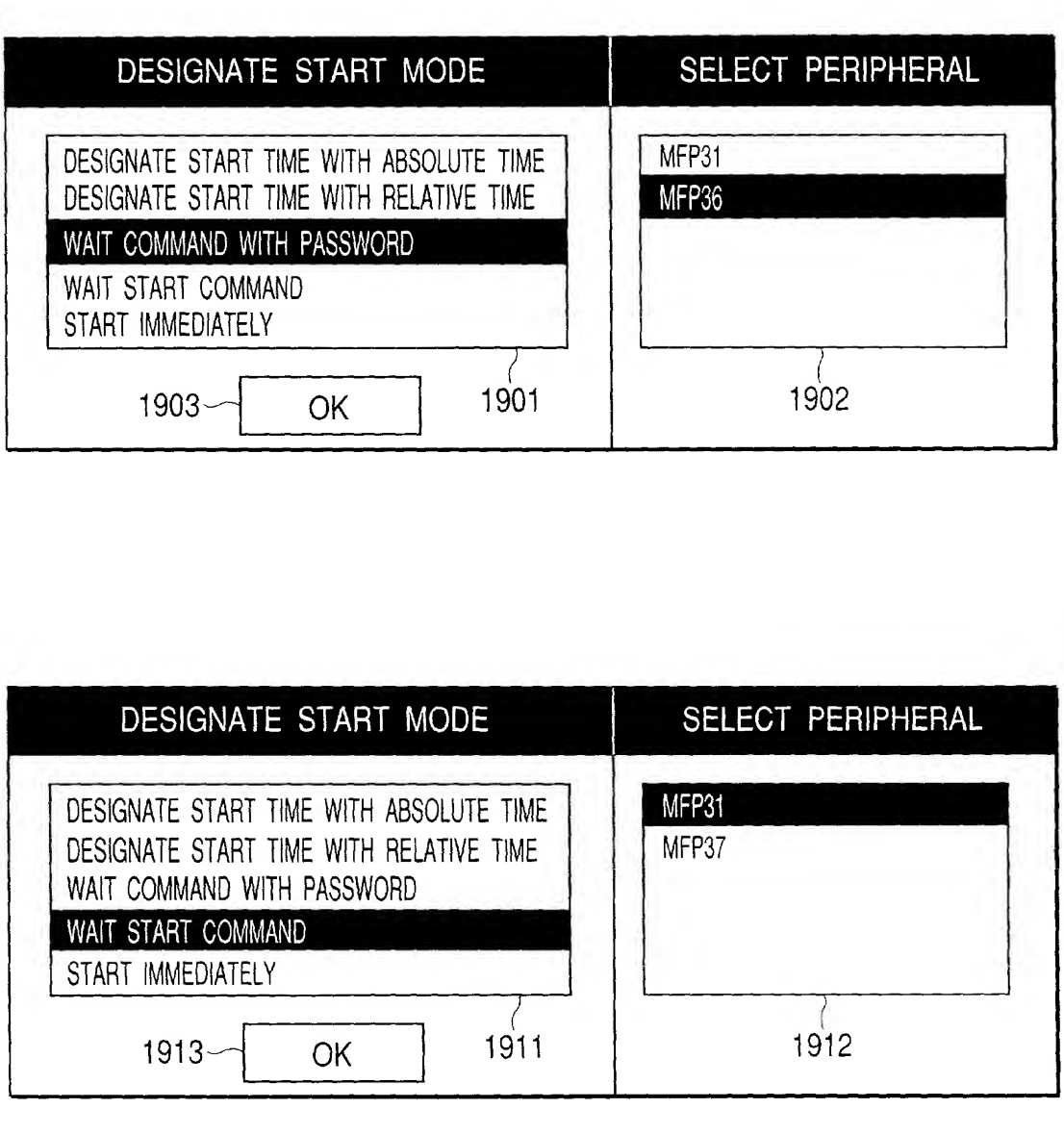

DESIGNATE START MODE
SELECT PERIPHERAL
DESIGNATE START TIME WITH ABSOLUTE TIME
DESIGNATE START TIME WITH RELATIVE TIME
WAIT COMMAND WITH PASSWORD
WAIT START COMMAND
START IMMEDIATELY
MFP31
MFP36
1903
OK
1901
1902
DESIGNATE START MODE
SELECT PERIPHERAL
DESIGNATE START TIME WITH ABSOLUTE TIME
DESIGNATE START TIME WITH RELATIVE TIME
WAIT COMMAND WITH PASSWORD
WAIT START COMMAND
START IMMEDIATELY
MFP31
MFP37
1913
OK
1911
1912

FIG. 20

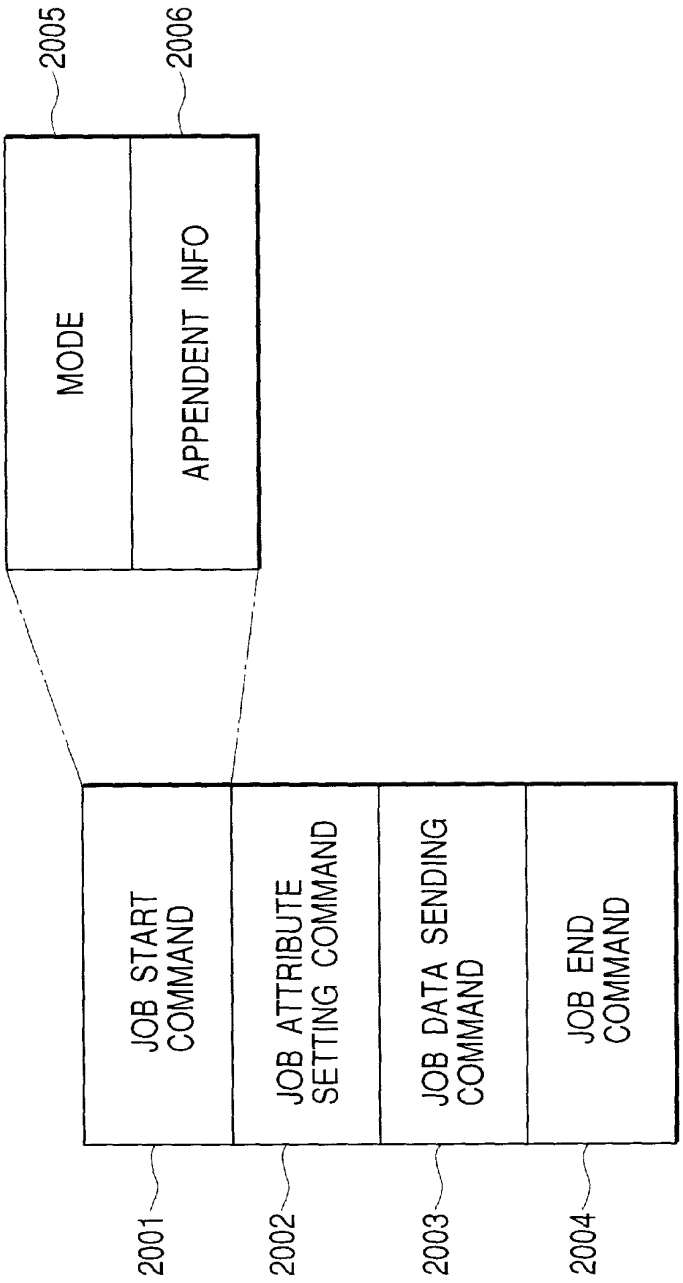
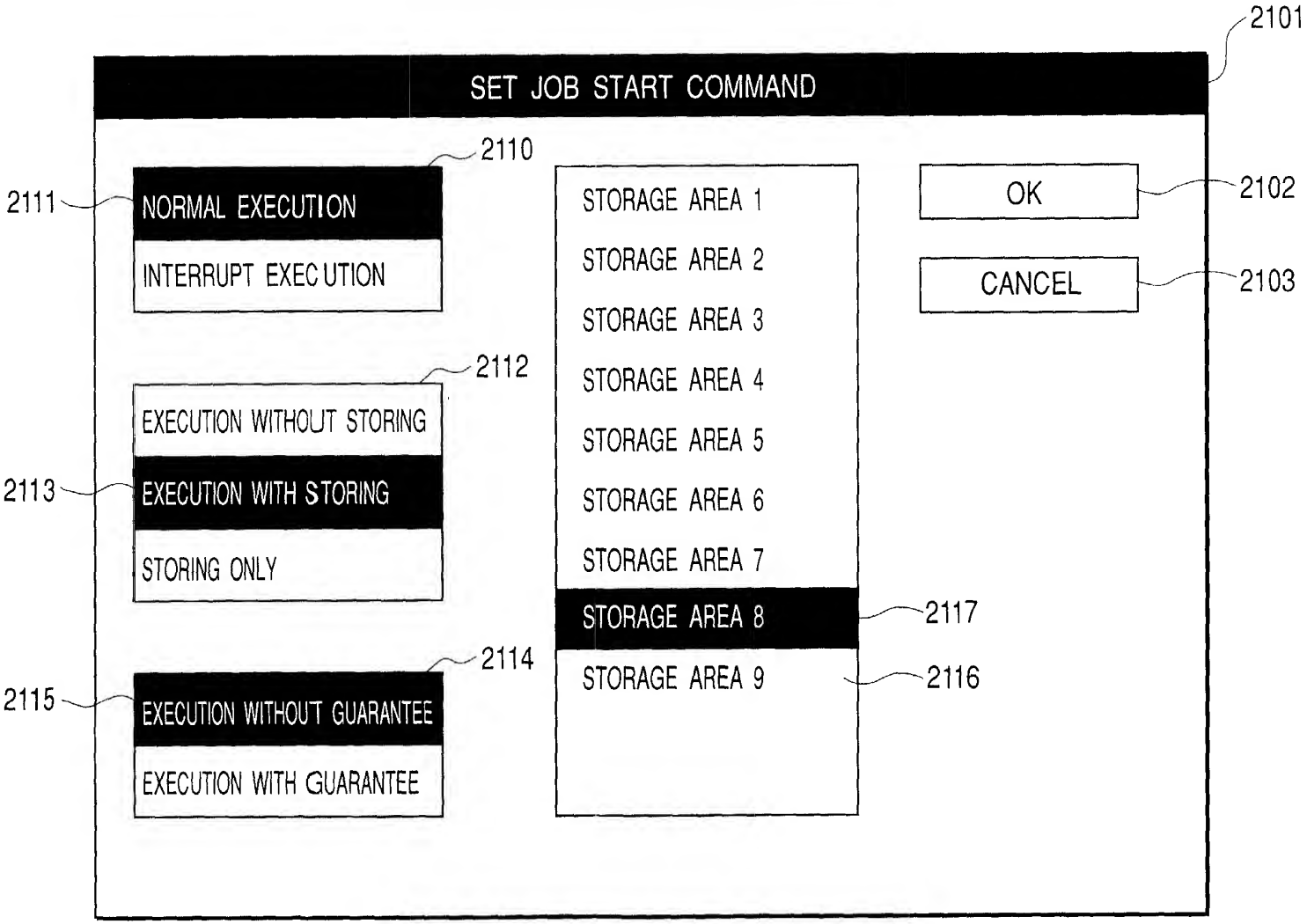

2005
2006
MODE
APPENDENT INFO
JOB START COMMAND
JOB ATTRIBUTE SETTING COMMAND
JOB DATA SENDING COMMAND
JOB END COMMAND
2001
2002
2003
2004

FIG. 21


2101
SET JOB START COMMAND
2110
2111
NORMAL EXECUTION
INTERRUPT EXECUTION
2112
EXECUTION WITHOUT STORING
2113
EXECUTION WITH STORING
STORING ONLY
2114
2115
EXECUTION WITHOUT GUARANTEE
EXECUTION WITH GUARANTEE
STORAGE AREA 1
STORAGE AREA 2
STORAGE AREA 3
STORAGE AREA 4
STORAGE AREA 5
STORAGE AREA 6
STORAGE AREA 7
STORAGE AREA 8
2117
STORAGE AREA 9
2116
OK
2102
CANCEL
2103

JP2020069660

FIG. 22

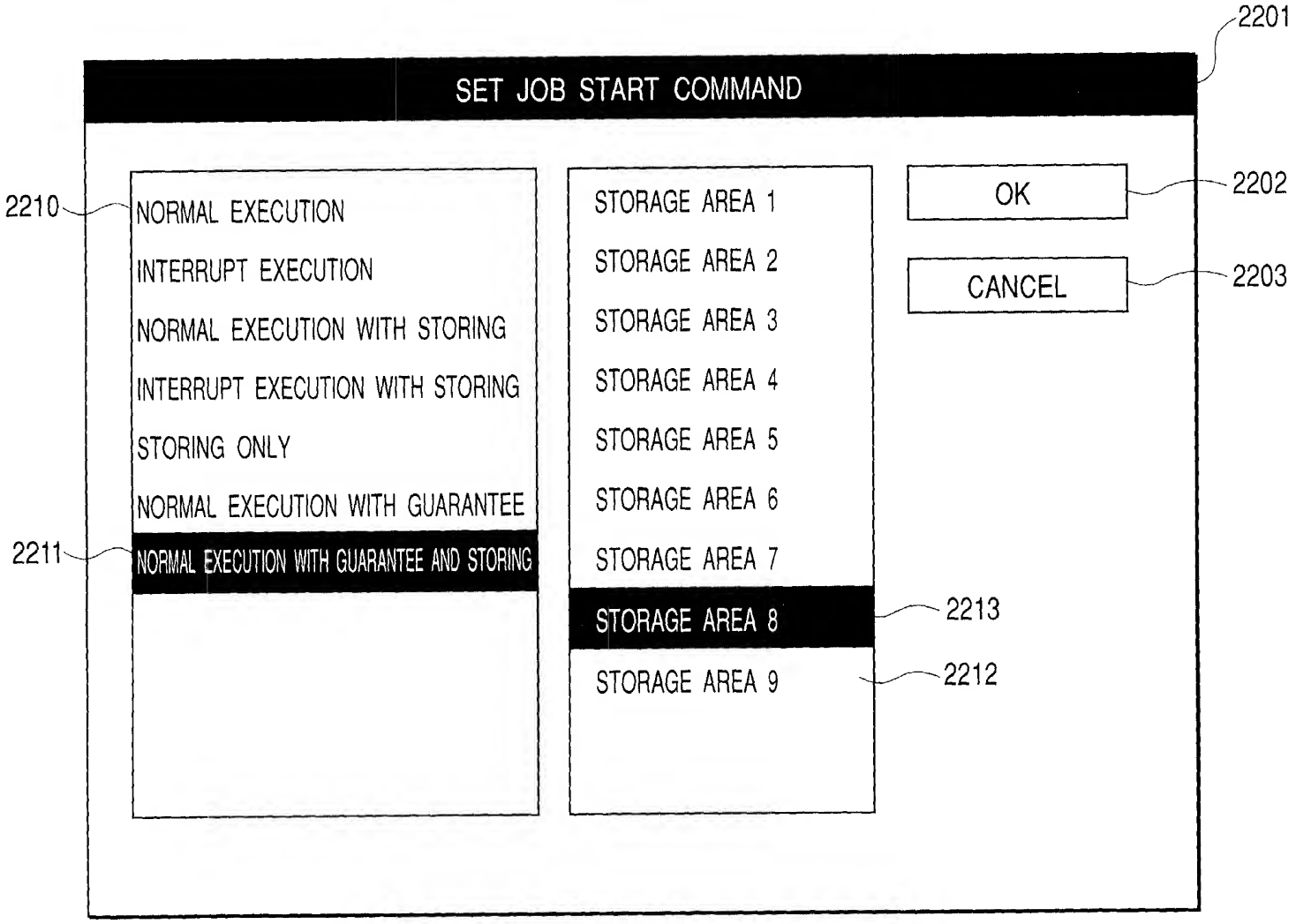


FIG. 23

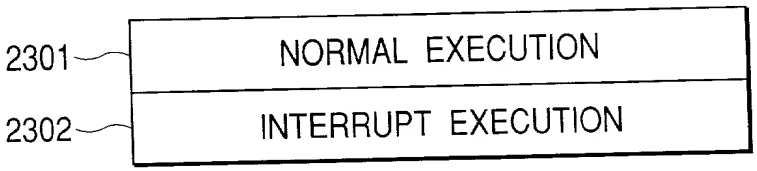


FIG. 24

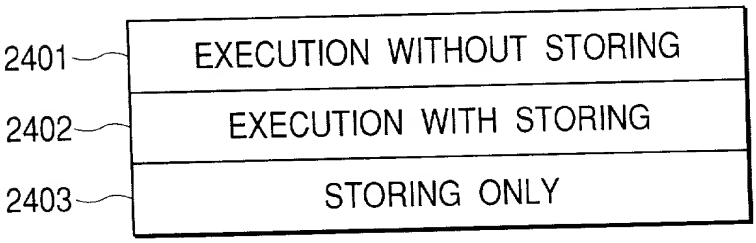
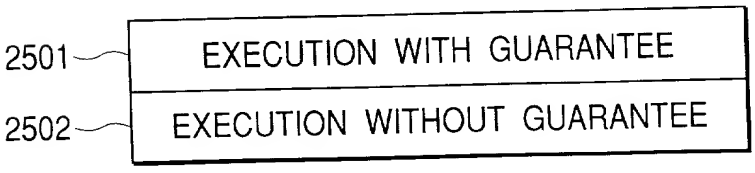


FIG. 25



0981590.07250

FIG. 26

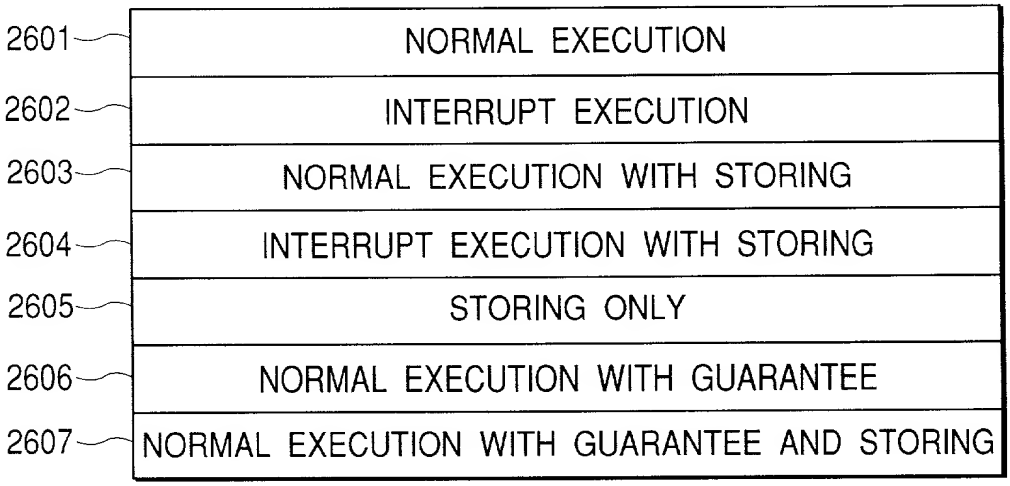


FIG. 27

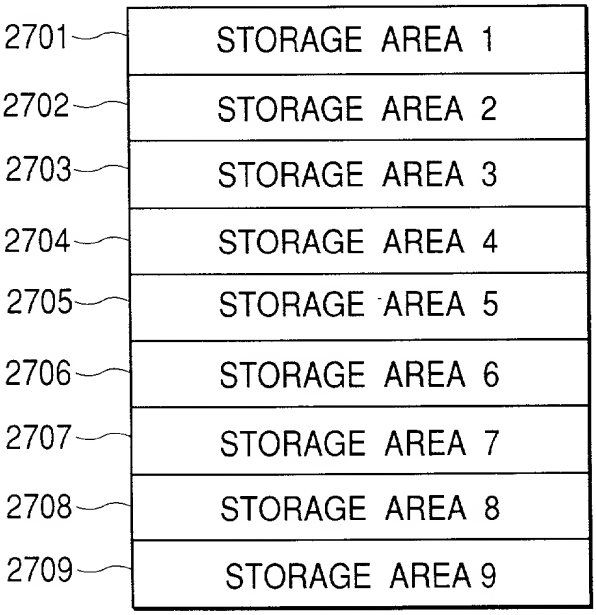


FIG. 28

FIG. 29

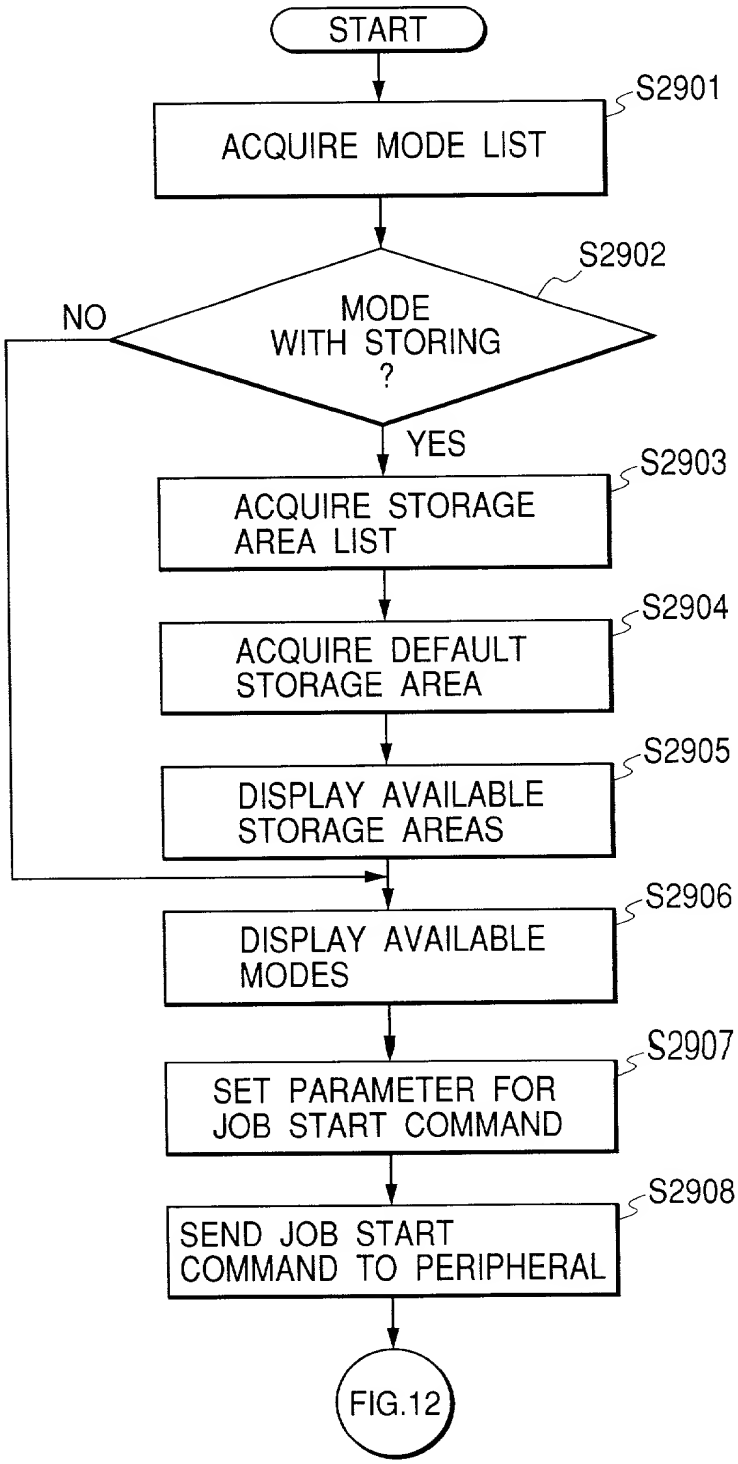

START
S2901
ACQUIRE MODE LIST
S2902
MODE WITH STORING ?
NO
YES
S2903
ACQUIRE STORAGE AREA LIST
S2904
ACQUIRE DEFAULT STORAGE AREA
S2905
DISPLAY AVAILABLE STORAGE AREAS
S2906
DISPLAY AVAILABLE MODES
S2907
SET PARAMETER FOR JOB START COMMAND
S2908
SEND JOB START COMMAND TO PERIPHERAL
FIG.12

FIG. 30

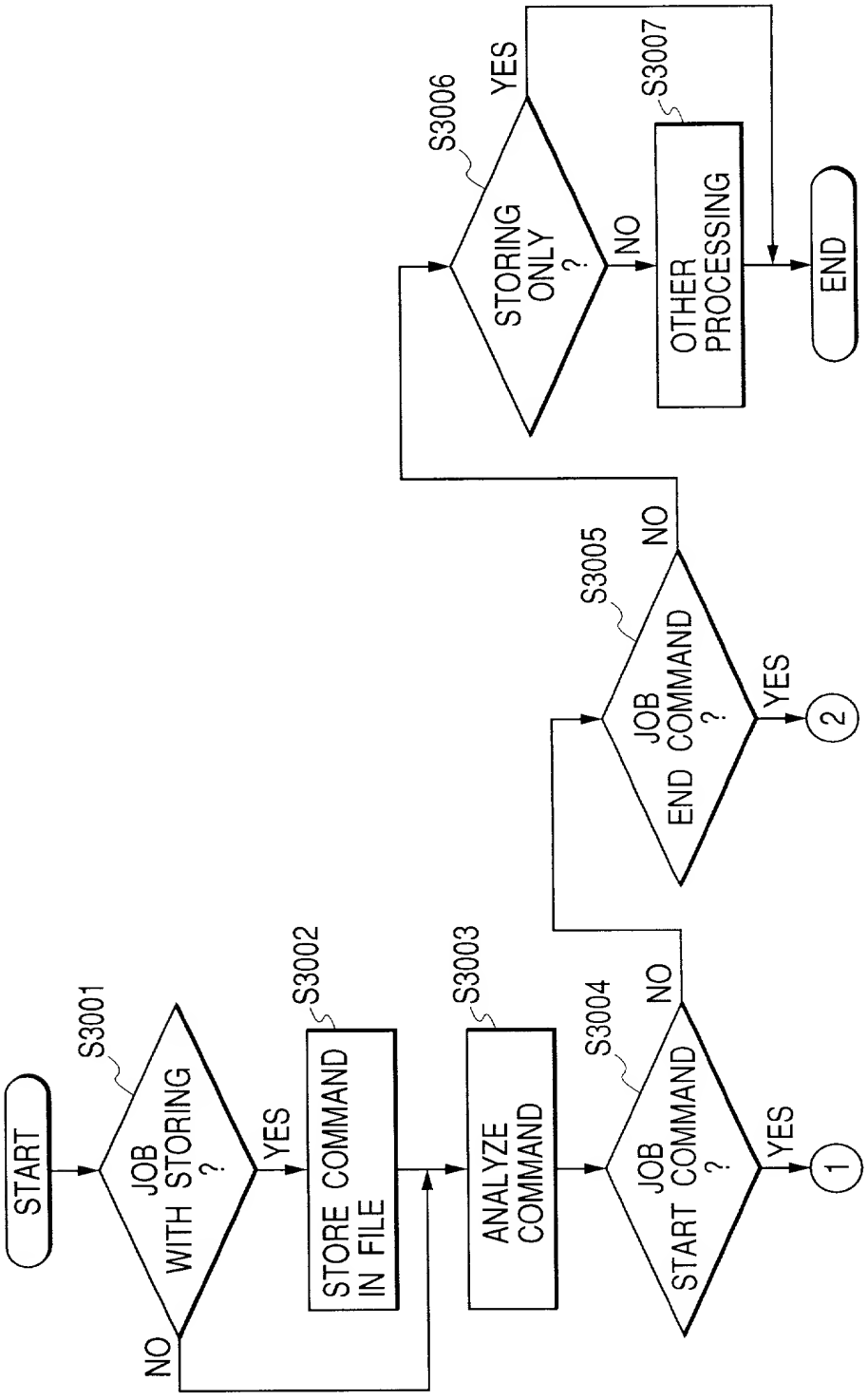

START
S3001
JOB WITH STORING ?
YES
NO
S3002
STORE COMMAND IN FILE
S3003
ANALYZE COMMAND
S3004
JOB START COMMAND ?
NO
YES
1
S3005
JOB END COMMAND ?
NO
YES
2
S3006
STORING ONLY ?
YES
NO
S3007
OTHER PROCESSING
END

FIG. 31

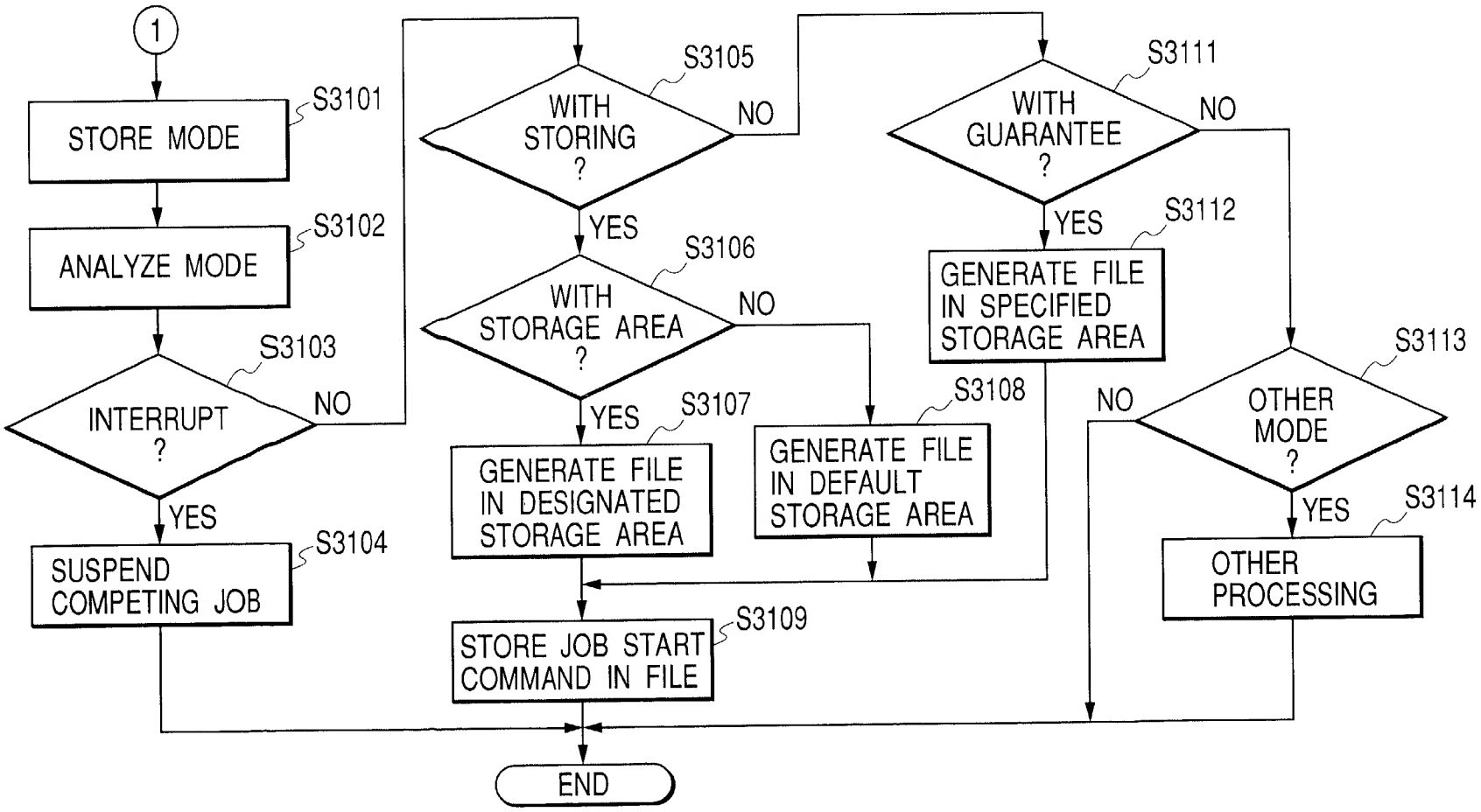

1
STORE MODE
S3101
ANALYZE MODE
S3102
INTERRUPT ?
S3103
NO
YES
SUSPEND COMPETING JOB
S3104
WITH STORING ?
S3105
NO
YES
WITH STORAGE AREA ?
S3106
NO
YES
GENERATE FILE IN DESIGNATED STORAGE AREA
S3107
GENERATE FILE IN DEFAULT STORAGE AREA
S3108
STORE JOB START COMMAND IN FILE
S3109
WITH GUARANTEE ?
S3111
NO
YES
GENERATE FILE IN SPECIFIED STORAGE AREA
S3112
OTHER MODE ?
S3113
NO
YES
OTHER PROCESSING
S3114
END

FIG. 32

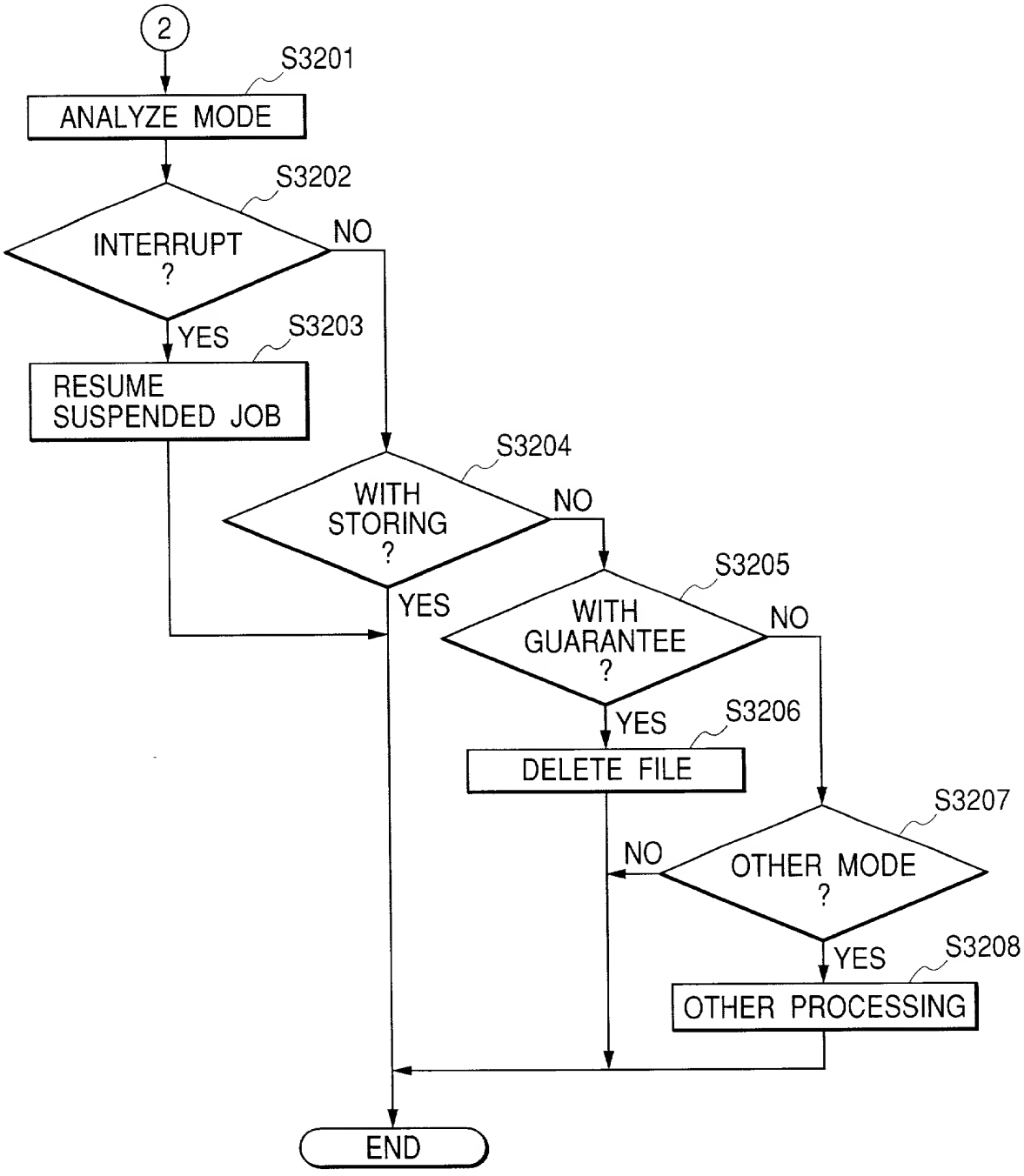

2
S3201
ANALYZE MODE
S3202
INTERRUPT ?
NO
YES
S3203
RESUME SUSPENDED JOB
S3204
WITH STORING ?
NO
YES
S3205
WITH GUARANTEE ?
NO
YES
S3206
DELETE FILE
S3207
NO
OTHER MODE ?
YES
S3208
OTHER PROCESSING
END

FIG. 33

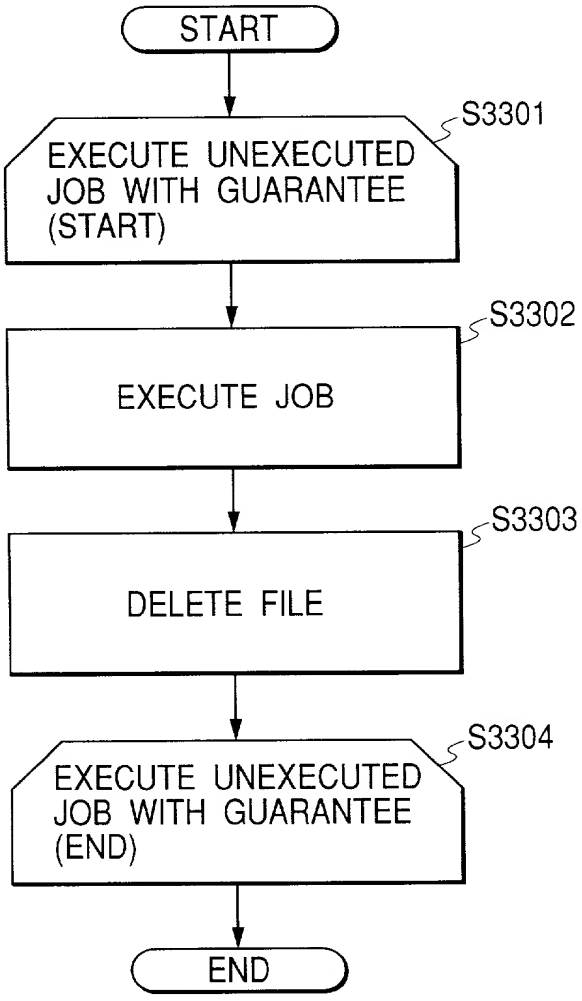

START
S3301
EXECUTE UNEXECUTED JOB WITH GUARANTEE (START)
S3302
EXECUTE JOB
S3303
DELETE FILE
S3304
EXECUTE UNEXECUTED JOB WITH GUARANTEE (END)
END

FIG. 34

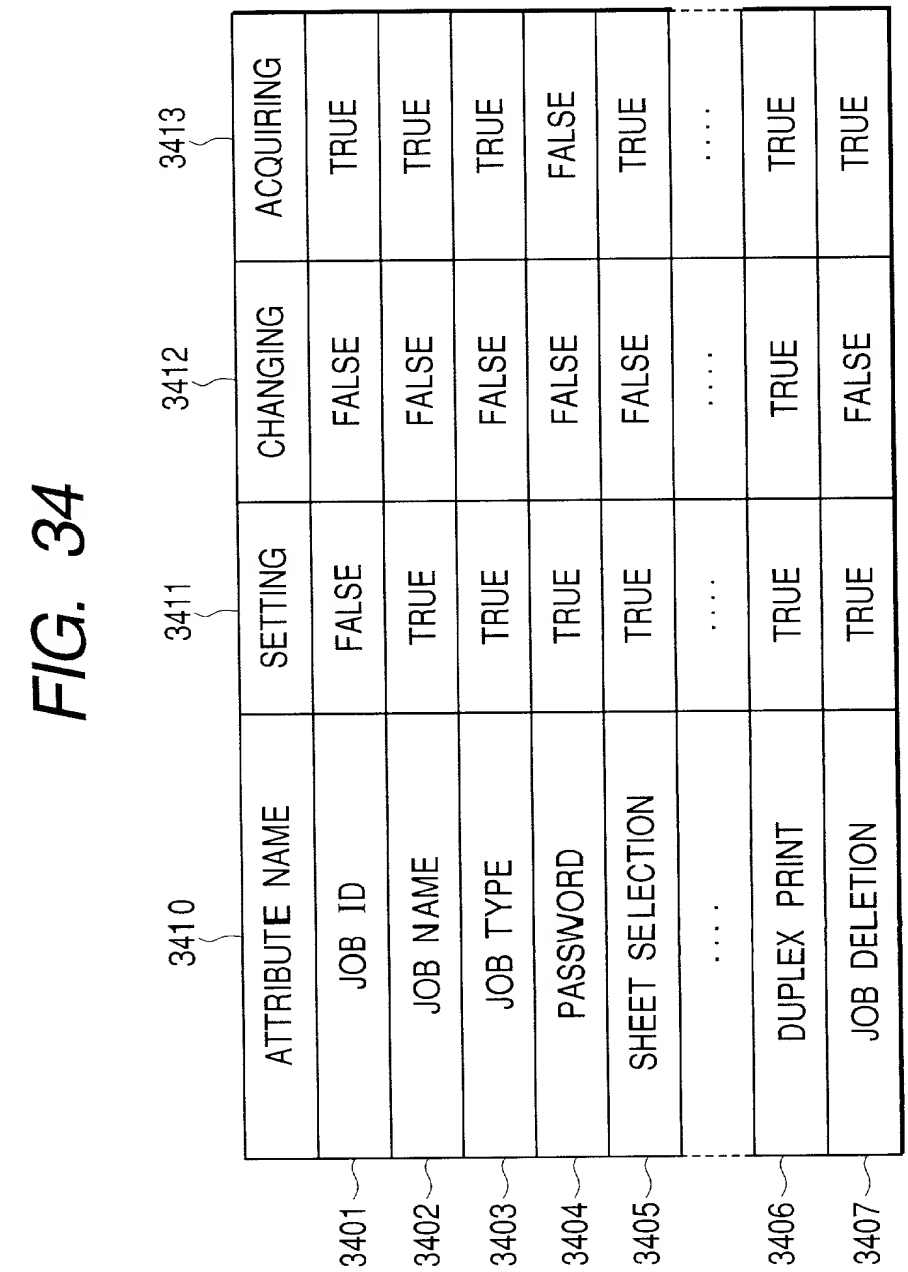

3410
3411
3412
3413
ATTRIBUTE NAME
SETTING
CHANGING
ACQUIRING
JOB ID
FALSE
FALSE
TRUE
JOB NAME
TRUE
FALSE
TRUE
JOB TYPE
TRUE
FALSE
TRUE
PASSWORD
TRUE
FALSE
FALSE
SHEET SELECTION
TRUE
FALSE
TRUE
. . . . .
. . . . .
. . . . .
. . . . .
DUPLEX PRINT
TRUE
TRUE
TRUE
JOB DELETION
TRUE
FALSE
TRUE
3401
3402
3403
3404
3405
3406
3407

FIG. 35

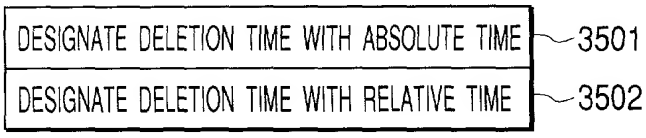


FIG. 36

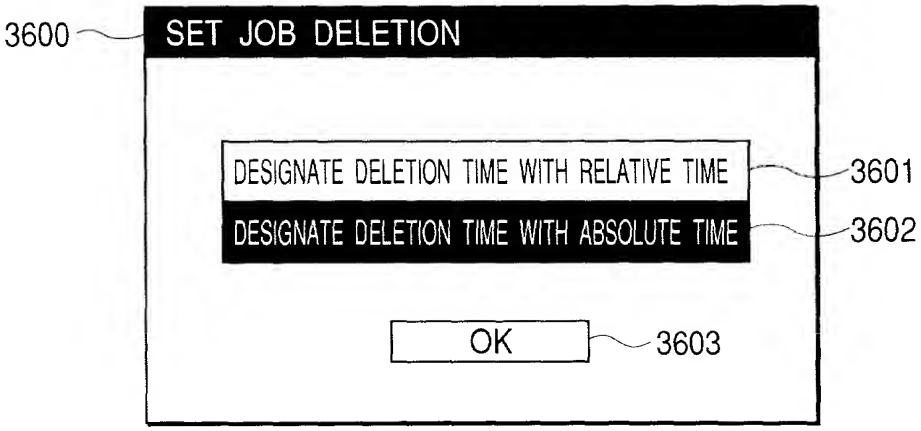


FIG. 37

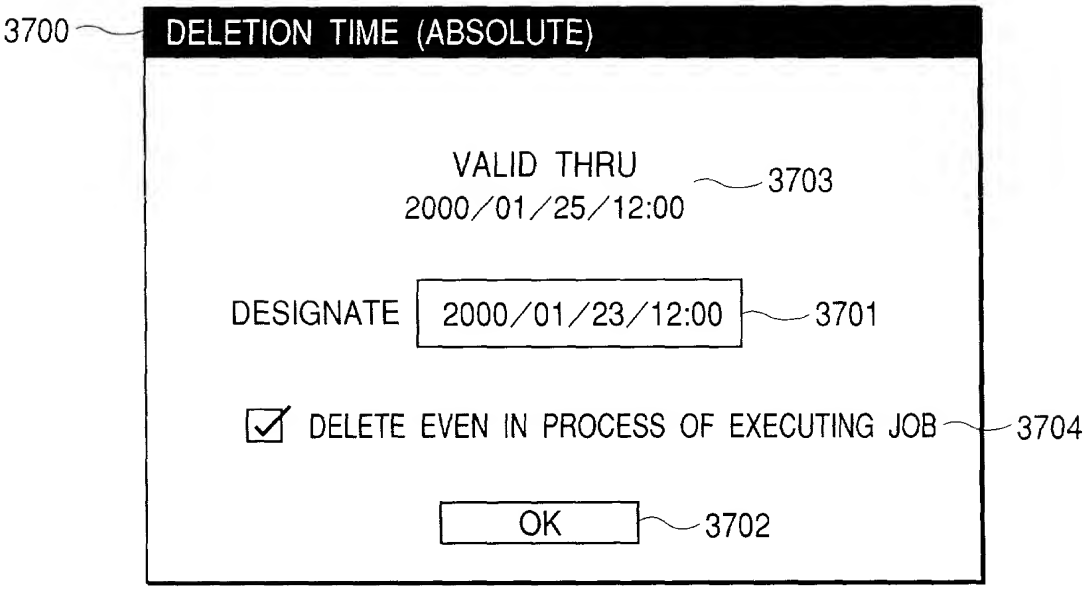


FIG. 38

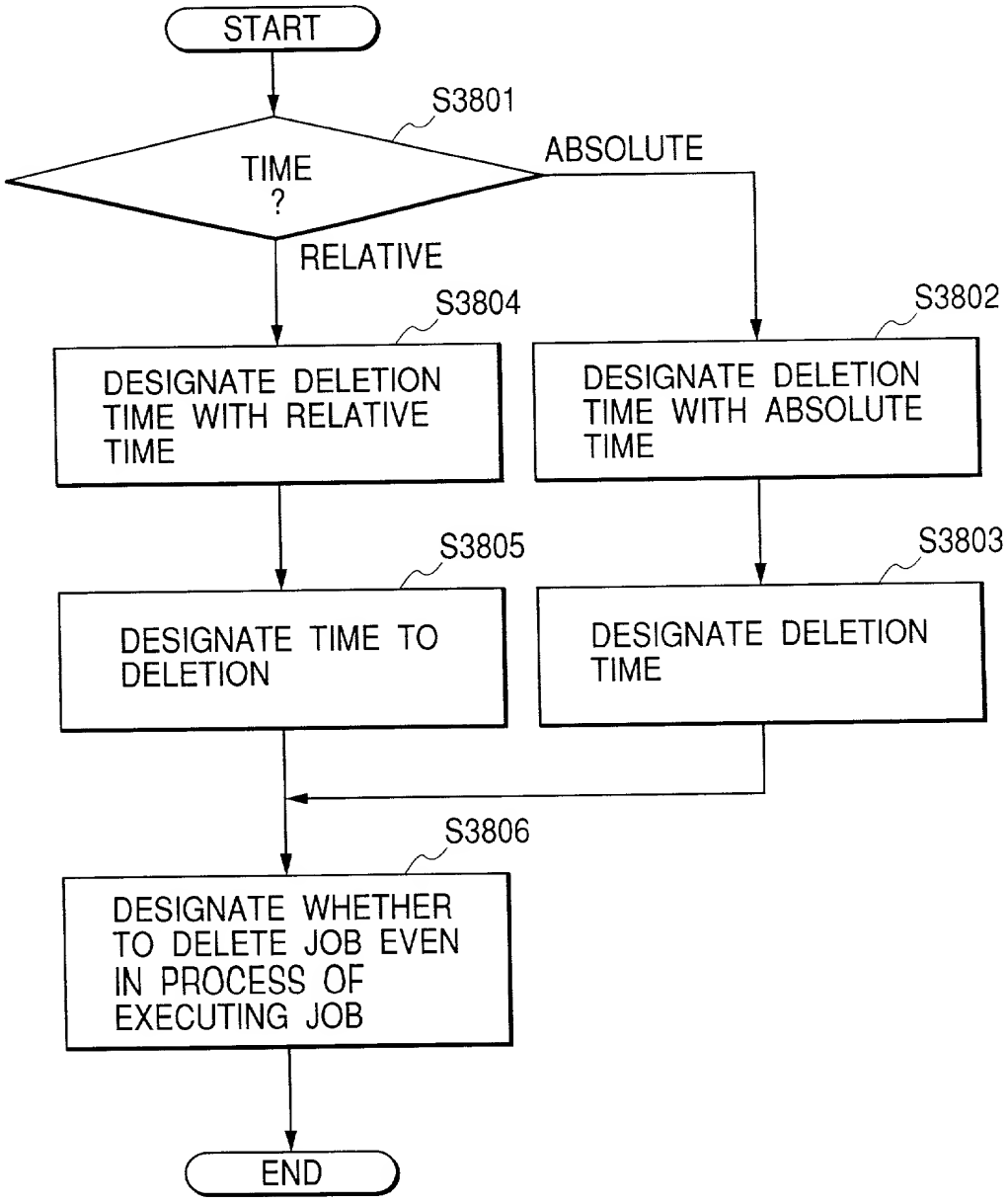

START
S3801
TIME ?
ABSOLUTE
RELATIVE
S3804
DESIGNATE DELETION TIME WITH RELATIVE TIME
S3802
DESIGNATE DELETION TIME WITH ABSOLUTE TIME
S3805
DESIGNATE TIME TO DELETION
S3803
DESIGNATE DELETION TIME
S3806
DESIGNATE WHETHER TO DELETE JOB EVEN IN PROCESS OF EXECUTING JOB
END

FIG. 39

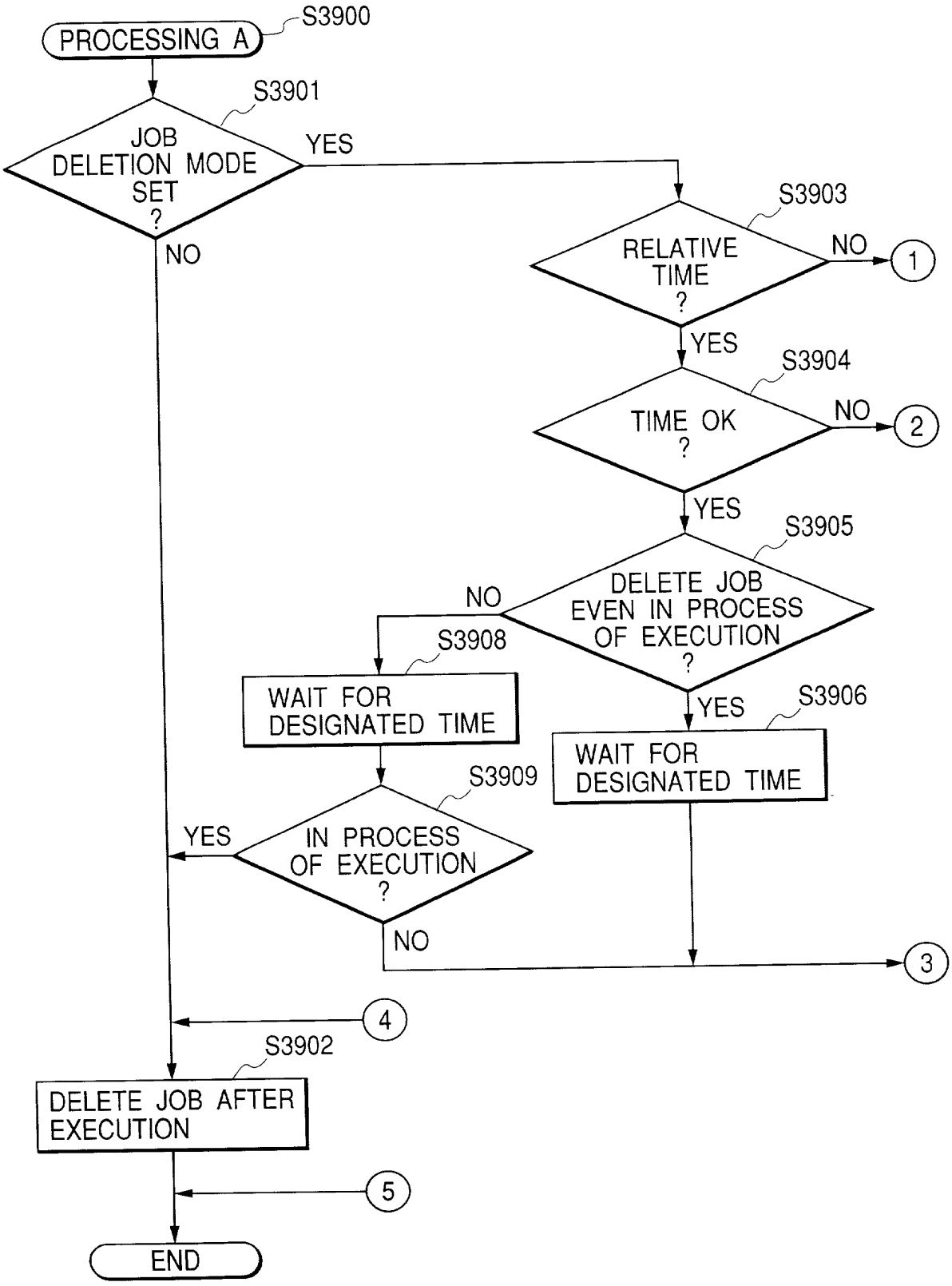

PROCESSING A
S3900
S3901
JOB DELETION MODE SET ?
YES
NO
S3903
RELATIVE TIME ?
NO
1
YES
S3904
TIME OK ?
NO
2
YES
S3905
DELETE JOB EVEN IN PROCESS OF EXECUTION ?
NO
S3908
WAIT FOR DESIGNATED TIME
YES
S3906
WAIT FOR DESIGNATED TIME
S3909
IN PROCESS OF EXECUTION ?
YES
NO
3
4
S3902
DELETE JOB AFTER EXECUTION
5
END

FIG. 40

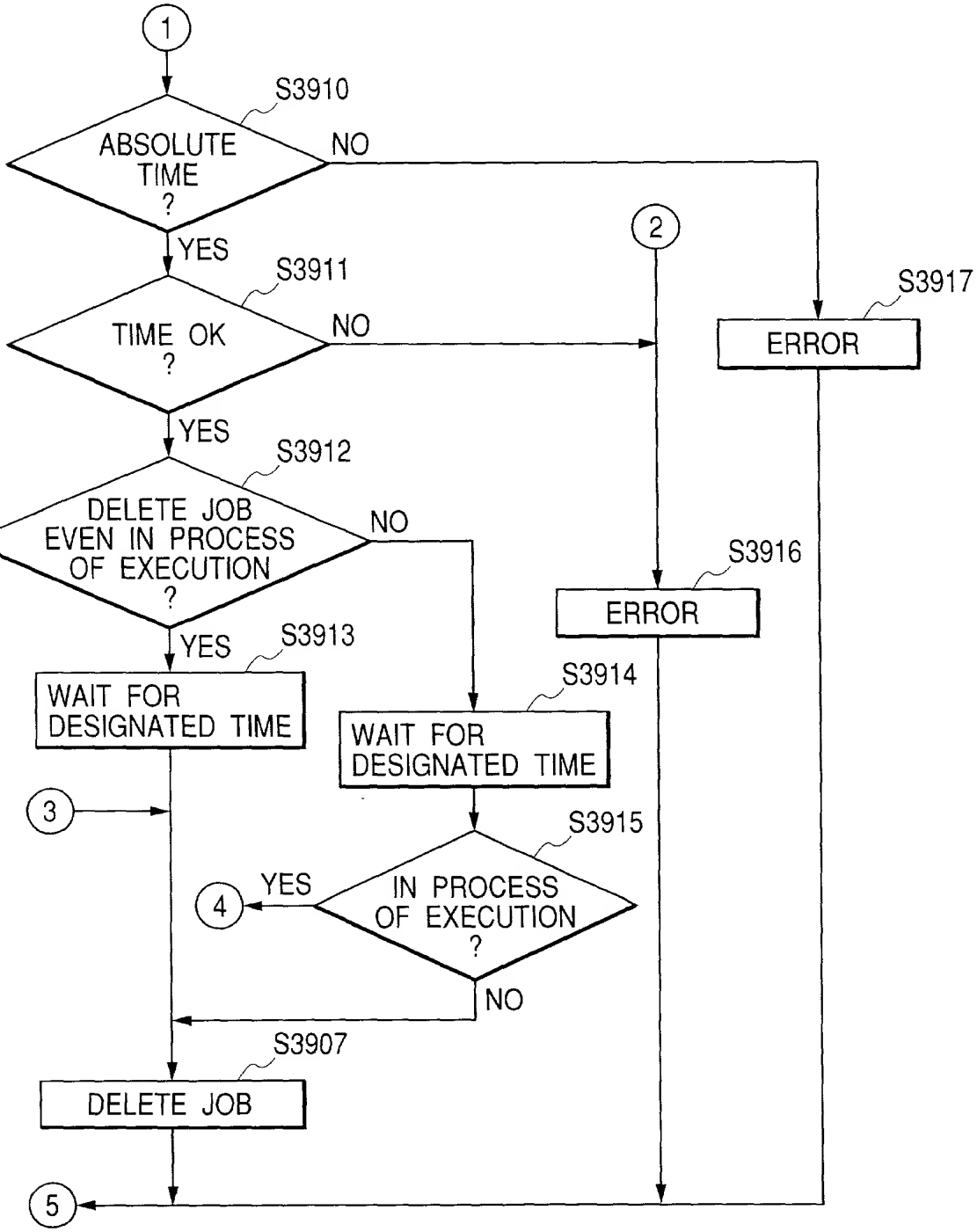
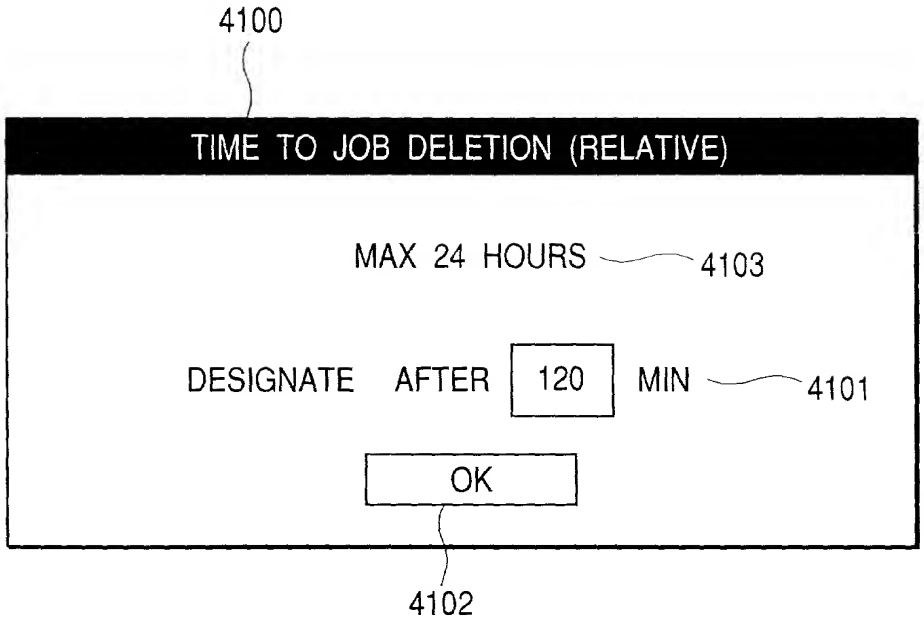

1
S3910
ABSOLUTE TIME ?
NO
YES
S3911
TIME OK ?
NO
YES
S3912
DELETE JOB EVEN IN PROCESS OF EXECUTION ?
NO
YES
S3913
WAIT FOR DESIGNATED TIME
3
2
S3917
ERROR
S3916
ERROR
S3914
WAIT FOR DESIGNATED TIME
S3915
IN PROCESS OF EXECUTION ?
YES
4
NO
S3907
DELETE JOB
5

FIG. 41


4100
TIME TO JOB DELETION (RELATIVE)
MAX 24 HOURS
4103
DESIGNATE AFTER
120
MIN
4101
OK
4102